

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Electronic power device comprising:

_____ an active part; [[,]]

_____ a first thin layer ~~which is~~ made of a semiconductor material and in which [[this]] the active part is formed; [[,]] ~~and~~

_____ a substrate made of an electrically conductive material; ~~this device being characterized in that it also comprises~~

_____ a carrier recombination zone ~~which is~~ located between the substrate and the first thin layer, wherein the carrier recombination zone provides ~~and which also ensures~~ a resistive electric contact between [[this]] the substrate and [[this]] the first thin layer.

2. (Currently Amended) Device as in claim 1, wherein the carrier recombination zone is a second thin layer ~~which is~~ made of an electrically conductive material and which ensures electrically conductive bonding between the substrate and the first thin layer.

3. (Original) Device as in claim 1, wherein the two sides of the first thin layer are treated to form active zones of the device.

4. (Original) Device as in claim 1, wherein the material in which the carrier recombination zone is made is a metal.

5. (Currently Amended) Device as in claim 1, wherein the material in which the carrier recombination zone is made is an alloy semiconductor/metal alloy.

6. (Currently Amended) Device as in claim 5, wherein the alloy in which the carrier recombination zone is ~~made is chosen so that it is~~ stable with respect to the materials in which the substrate and the first thin layer are respectively made.

7. (Currently Amended) Device as in claim 1, wherein the material in which the substrate is made is a highly doped semiconductor, ~~in particular highly doped silicon~~.

8. (Original) Device as in claim 7, wherein the material in which the carrier recombination zone is made is a metal and this metal is chosen so that, when fabricating the resistive electric contact, it forms a stable alloy with the highly doped semiconductor in which the substrate is made and with the semiconductor material in which the first thin layer is made.

9. (Original) Device as in claim 1, wherein the material in which the substrate is made is a metal.

10. (Original) Device as in claim 9, wherein the carrier recombination zone is made in the metal in which the substrate is made and is formed by part of this substrate.

Claims 11-22 (Cancelled)

23. (New) Process for fabricating an electronic power device comprising:

disposing a treatment support on a front side of a semiconductor substrate;

thinning the semiconductor substrate along a rear side to form a thinned semiconductor substrate;

depositing a thin layer of conductive material on the rear side of the thinned semiconductor substrate;

performing electrically conductive bonding of the thinned semiconductor substrate with an electrically conductive substrate, the thin layer of conductive material being between the rear surface of the thinned semiconductor substrate and the electrically conductive substrate; and

removing the treatment support from the front side of the semiconductor substrate.

24. (New) Process as in claim 23, further comprising forming a plurality of electric contacts on the thinned semiconductor substrate and the electrically conductive substrate.

25. (New) Process as in claim 23, wherein the electrically conductive substrate is made of either a highly doped semiconductor or a conductor of a metal.

26. (New) Process as in claim 25, wherein the electrically conductive substrate is made of a metal such that the electrically conductive substrate forms a stable alloy with the semiconductor substrate material after an annealing process.

27. (New) Process as in claim 23, further comprising preparing at least one of the front and rear sides of the semiconductor substrate prior to performing the electrically conductive bonding to promote bonding of the at least one of the front or rear sides.

28. (New) Process as in claim 23, wherein the electrically conductive bonding is at least one of soldering, thermal compression, or molecular adhesion.

29. (New) Process for fabricating an electronic power device comprising:
depositing a thin layer of conductive material to a rear side of a semiconductor substrate;

performing electrically conductive bonding on the rear side of the semiconductor substrate with a front side of an electrically conductive substrate, the thin layer of conductive material being between the rear side of the semiconductor substrate and the front side of the electrically conductive substrate;

thinning the semiconductor substrate to form a thin semiconductor substrate.

30. (New) Process as in claim 29, further comprising forming a plurality of electric contacts on the thinned semiconductor substrate and the electrically conductive substrate.

31. (New) Process as in claim 29, wherein the electrically conductive substrate is made of either a highly doped semiconductor or a conductor of a metal.

32. (New) Process as in claim 31, further comprising performing an annealing process after performing the electrically conductive bonding, wherein the electrically conductive substrate forms a stable alloy with the electrically conductive substrate and the thinned semiconductor substrate after the annealing process.

33. (New) Process as in claim 29, further comprising preparing at least one of the front and rear sides of the thinned semiconductor substrate prior to performing the electrically conductive bonding to promote bonding of the at least one of the front or rear sides.

34. (New) Process as in claim 29, wherein the electrically conductive bonding is at least one of soldering, thermal compression, or molecular adhesion.